

I CLAIM

1. A frame mount assembly for a subsurface aircraft servicing pit having an upright pit wall enclosure atop which a bearing ledge surrounds an open pit access opening comprising:

5 a pit lid mounting frame having an underside and an outer peripheral margin that seats upon said bearing ledge,

a frame mount latch ring depending from said underside of said pit lid mounting frame and located within the circumference of said upright pit wall enclosure, and

10 a plurality of frame mount latches having bases attached to said pit wall enclosure at spaced intervals from each other, and hooks that are extendable from said bases to a latching position engaging said frame mount latch ring at spaced locations thereon and said hooks are retractable toward said bases to thereby force said peripheral margin of said pit lid mounting frame downwardly upon said bearing ledge
15 whereby said pit lid mounting frame bears down upon said bearing ledge with a force that exceeds gravitational force on said pit lid mounting frame.

2. A frame mount assembly according to Claim 1 wherein each of said latches is comprised of a resiliently deformed spring acting between said base and said hook thereof.

3. A frame mount assembly according to Claim 2 wherein each of said frame mount latches is further comprised of a tubular spring guide and said spring is a coil

spring disposed within said tubular spring guide.

4. A frame mount assembly according to Claim 3 wherein each of said latches further comprises a catch that includes said hook and a link which has a shank that extends through said coil spring and a retainer located on said shank, and said spring exerts opposing forces against said retainer and said tubular spring guide, and wherein said hook can be extended from said link by an upward force exerted thereon to resiliently deform said coil spring thereby allowing sufficient upward movement of said hook to engage said frame mount latch ring, whereupon said spring exerts a downward force on said frame mount latch ring.

5. A frame mount assembly according to Claim 4 wherein said link of each frame mount latch is joined to said base thereof by a rotatable connector.

6. A frame mount assembly according to Claim 1 further comprising spacing members interposed between said frame mount latch bases and said wall enclosure.

7. A frame mount assembly according to Claim 1 further comprising an annular, resilient, gasket interposed between said peripheral margin of said mounting frame and said bearing ledge, and wherein each of said frame mount latches includes a biasing member that exerts a compressive force on said pit lid mounting frame against said bearing ledge to aid said gasket in creating a watertight seal between said peripheral margin of said mounting frame and said bearing ledge.

8. A frame mount assembly according to Claim 1 wherein said upright wall enclosure has a cylindrical, annular shape.

9. A frame mount assembly for a subsurface aircraft servicing pit having at least one upright wall that forms a complete laterally encircling enclosure to define a pit cavity therewithin and having a peripheral bearing ledge located atop and peripherally beyond said laterally encircling enclosure, comprising:

5 a pit lid mounting frame having an undersurface and a peripheral margin that rests upon said peripheral bearing ledge,

a frame mount latch ring secured to said pit lid mounting frame depending beneath said undersurface of said pit lid mounting frame and within said pit cavity within the lateral confines of said laterally encircling enclosure, and

10 a plurality of latches having bases anchored to said at least one upright wall at laterally separated locations thereon and catches rotatably joined to said bases and having hooks thereon located remote from said bases and said hooks are releaseably engageable with said frame mount latch ring, and said latches include retracting elements for drawing said hooks toward said bases, whereby said hooks are
15 releaseably engageable with said frame mount latch ring and said retracting elements exert forces on said pit lid mounting frame through said hooks and said latching ring that press said peripheral margin of said pit lid mounting frame downwardly upon said bearing ledge.

10. A frame mount assembly according to Claim 9 wherein each of said retracting elements is comprised of a coil spring.

11. A frame mount assembly according to Claim 9 wherein said coil spring is

resiliently compressible.

12. A frame mount assembly according to Claim 9 further comprising an elbow joining said catch to said base in each of said latches, and said elbow terminates in a foot captured by said base, whereby said elbow is rotatable relative to said base.

13. A frame mount assembly according to Claim 9 wherein said catch in each of said latches is located inwardly from said frame mount latch ring and said hook thereof is directed outwardly from said catch to project outwardly over the top of said frame mount latch ring and engage said frame mount latch ring from above.

14. A frame mount assembly according to Claim 13 wherein said at least one upright wall is cylindrical and further comprising latch spacers interposed between said latch bases and said cylindrical wall, and said frame mount latch ring is spaced inwardly from said cylindrical wall a uniform distance throughout its circumference.

15. A frame mount assembly according to Claim 14 further comprising an expansion band and wherein said spacers are mounted upon said expansion band to project inwardly therefrom into said pit cavity, and said expansion band conforms to the surface of said cylindrical wall and is expandable outwardly against said cylindrical wall at a selected angular orientation within said laterally encircling enclosure.

16. In combination,
a prefabricated aircraft servicing pit buried beneath a surface across which aircraft travel when not airborne and including a laterally surrounding upright enclosing structure topped with a laterally outwardly projecting bearing ledge,

5 a pit lid mounting frame having an underside and a peripheral flange that seats upon said bearing ledge,

 a frame mount latch ring secured to said pit lid mounting frame beneath said underside thereof, and residing within the lateral confines of said upright enclosing structure, and

10 a plurality of frame latches anchored at selected locations to said upright enclosing structure below said frame mount latch ring and including hooks for engaging said frame mount latch ring and a releaseable retraction member for exerting a force between said hooks and said mount latch ring in one direction and said upright enclosing structure in an opposite direction, thereby drawing said peripheral flange of said pit lid mounting frame down upon said outwardly projecting bearing ledge.

17. A combination according to Claim 16 wherein said retraction member is a resilient coil spring.

18. A combination according to Claim 16 wherein said hooks engage said frame mount latch ring from above and are directed outwardly toward said surrounding, upright enclosing structure.

19. A combination according to Claim 16 further comprising latch spacers interposed between said frame latches and said upright enclosing structure to position said latches inwardly from said frame mount latch ring.

20. A combination according to Claim 16 wherein each of said latches is comprised of a catch and a base, and an elbow having a laterally directed leg with a

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foot captured by said base and an opposite leg, whereby said base is anchored to said upright enclosing structure and said elbow is rotatable about said laterally directed leg relative to said base and said catch includes said hook and a tubular spring guide having a central axis and connected to said laterally directed leg of said elbow and said releaseable retraction member is a coil spring located within said spring guide, and said opposite leg of said elbow is a link formed with a longitudinal shank held concentrically within said spring, and said tubular guide is rotatable relative to said link about said central axis of said spring guide.